![RCA logo]

6K8, 6K8-G, 6K8-GT

TRIODE—HEXODE CONVERTER

6K8 6K8-G 6K8-GT ★

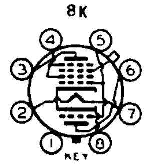
Heater■ Coated Unipotential Cathode

Voltage	6.3	a-c or d-c volts
Current	0.3	amp.

Direct Interelectrode Capacitances:

	6K8°	6K8-G▲	6K8-GT▲	
Hexode Grid #3 to Hexode Plate	0.03	0.08	0.08	max. μμf
Hexode Grid #3 to Triode Plate	0.02	0.05	0.05	max. μμf
Hexode Grid #3 to Triode Grid & Hexode Grid #1	0.2	0.2	0.2	max. μμf
Triode Grid & Hexode Grid #1 to Triode Plate	1.1	1.8	1.8	μμf
Triode Grid & Hexode Grid #1 to Hexode Plate	0.1	0.15	0.15	max. μμf
Hexode Grid #3 to All Other Electrodes (R-F Input)	6.6	4.6	4.6	μμf
Triode Plate to All Other Electrodes Except Triode Grid & Hexode Grid #1 (Osc. Output)	3.2	3.4	3.4	μμf
Triode Grid & Hexode Grid #1 to All Other Electrodes Except Triode Plate (Osc. Input)	6.0	6.5	6.5	μμf
Hexode Plate to All Other Electrodes (Mixer Output)	3.5	4.8	4.8	μμf
Overall Length	3-1/8" max.	4-7/32" to 4-15/32"	3-9/16" max.	
Seated Height	2-9/16" max.	3-21/32" to 3-29/32"	3" max. ←	
Maximum Diameter	1-5/16"	1-9/16"	1-5/16"	
Bulb	Metal Shell, MT-8	ST-12	T-9	
Cap	Miniature	Skirted Min.	Skirted Min.	
Base	Small Wafer Octal 8-Pin	Sm. Shell Oct. 8-Pin	Sm. Wafer Oct. 8-Pin, Sleeve	
Basing Designation	8K	G-8K	GT-8K	

Pin 1 { 6K8, Shell; 6K8-G, No Con.; 6K8-GT, Sleeve }
Pin 2 - Heater
Pin 3 - Hexode Plate
Pin 4 - Hexode Grids #2 & #4



Pin 5 - Hexode Grid #1 & Triode Grid
Pin 6 - Triode Plate
Pin 7 - Heater
Pin 8 - Cathode
Cap - Hexode Grid #3

Mounting Position: Any

BOTTOM VIEW

CONVERTER SERVICE ←

Hexode Plate Voltage		300 max.	volts
Hexode Screen (Grids #2 & #4) Voltage		150 max.	volts
Hexode Screen Supply Voltage		300 max.	volts
Hexode Control-Grid (Grid #3) Voltage		0 min.	volts
Triode Plate Voltage		125 max.	volts
Hexode Plate Dissipation		0.75 max.	watt
Hexode Screen Dissipation		0.7 max.	watt
Triode Plate Dissipation		0.75 max.	watt
Total Cathode Current		16 max.	ma.
Typical Operation:			
Hexode Plate Voltage	100	250	volts
Hexode Screen Voltage	100	100	volts
Hexode Control-Grid Voltage	-3	-3	volts
Triode Plate Voltage	100	100	volts
Triode Grid Resistor	50000	50000	ohms
Hexode Plate Resistance (approx.)	0.4	0.6	megohm
Conversion Transconductance	325	350	μmhos
Conversion Transcond. with Hexode Grid #3 Bias of -30 volts (approx.)	2	2	μmhos
Hexode Plate Current	2.3	2.5	ma.
Hexode Screen Current	6.2	6.0	ma.
Triode Plate Current	3.8	3.8	ma.
Triode Grid & Hexode Grid #1 Current	0.15	0.15	ma.
Total Cathode Current	12.5	12.5	ma.

NOTE: The transconductance of the triode section, not oscillating, is approximately 3000 μmhos when the triode plate volts = 100 and the triode grid volts = 0.

■ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

▲ With close-fitting shield connected to cathode.

° With shell connected to cathode.

← Indicates a change.

6K8

6K8

OPERATION CHARACTERISTICS

E_f = 6.3 VOLTS

CURVE	----	——
HEXODE PLATE VOLTS	100	250
TRIODE PLATE VOLTS	100	100
HEXODE SCREEN (GRIDS Nº 2 & 4) VOLTS	100	100
HEXODE CONTROL-GRID (GRID Nº 3) VOLTS	-3	-3
TRIODE GRID RESISTOR (OHMS)	50000	50000

